MODIS Technical Team Meeting
Thursday, January 22, 2004
GSFC Building 33, Room E125

Meeting chaired by Vince Salomonson. Present were Barbara Conboy, Bob Barnes, Ed Masuoka, Greg Leptoukh, Steve Kempler, Shaida Johnston, Chuck McClain, Dorothy Hall, and Michael King, with David Herring taking the minutes.

1.0 Upcoming Meetings

- MODIS Science Team Meeting, — POSTPONED – Date TBD
- MODIS Ocean Color Review Meeting, Aerospace Bldg., Rm. 408, Lanham, MD February 11 & 12, 2004

2.0 Meeting Minutes

2.1 General Discussion

Salomonson reported that he has received from NASA a preliminary list of the new MODIS Science Team members (about 60 names). About 20 of those people will have contracts; the rest will be funded through grants.

As for the next MODIS Science Team Meeting, Salomonson says he feels it necessary to wait for people to get under contract or at least have approval to charge funds to their new contract or grant before setting a date. He is hoping that this will occur as soon as possible because he is anxious to reconvene the Science Team and meet and welcome all involved.

2.2 Instrument Status

Barnes reported that according to yesterday's meeting, it appears Terra MODIS' Direct Broadcast (DB) is back on and functioning normally. The concerns of the Science Team are being addressed.

2.3 DAAC

Kempler reported that the GDAAC has been running about 24 hours from the leading edge from acquisition to data availability. Terra processing is going very well and Aqua reprocessing has started as well. At the most recent PIP meeting, there was talk about the forthcoming transition for access to MODIS ocean color data. Kempler plans to send out an e-mail describing how that will happen with details on where to obtain MODIS Ocean Color products.

Salomonson suggested holding off on that email for a bit; there is a plan for this transition that Masuoka, Feldman, and McClain worked out. Dr. Paula Bontempi at HQ will review it, and if she gives it the green light, then Kempler can send out the email. Kempler said that he wants to be sure to give users enough prior notice that this transition will be occurring and suggested that he said the email to Paula prior to sending it out publicly (Chuck and Gene had already okayed the email). This was acceptable to all.

Leptoukh said that he has been having discussions with Feldman and McClain about changes to the MODIS L1A data subset. One option is to change the format of the L1A subset so that it is more compatible with what SeaDAS can use (so that there is no need to reformat the data). Leptoukh got a note from Bob Evans saying that the data can come from SeaDAS in near real time as opposed to the GDAAC. For SST reprocessing, the GDAAC is still using the current format, and that is still an open issue. Masuoka said that SDST agreed to make a change to adapt to reading the SeaWiFS format, and as soon as the code is in place, then the DAAC can switch over to pushing the SeaWiFS format L1A subset to MODAPS.

McClain said that SeaDAS currently gets its L0 data in near real time from the "bent pipe." These are available for browse within an hour or two. Once they get real ephemeris and updated ancillary data, the L0 data is reprocessed. Waiting for the ephemeris and updated ancillary data can mean about a 2-day lag. Then, if some data are missing, they use the GDAAC data, primarily for filling in data gaps and dropouts. But this doesn't mean there doesn't need to be another copy of the data some place else. Also, SeaDAS only preserves the subset of the data that his team is interested in, not the entire data set, which is another good reason to continue storing the entire data set in the GDAAC.

Kempler asked if it's possible for someone to come in and get slightly different data between those two data sets (referring to the near-real-time data versus the reprocessed data)? McClain said yes; if users want the best quality, then they must wait a week. Users need to be aware of that. Salomonson asked if someone gets data from GDAAC and compares them to a granule in SeaDAS, would they be the same? McClain said yes, they should. The point was made that MODIS DB is another "outlier" and that those data could also yield slightly different results than what is stored in the GDAAC, depending upon how the DB data are processed.

2.4 MODAPS

Masuoka reported that SDST is about to start Land reprocessing today on the swing shift. EDC is also putting in new software on the ingest servers to protect against data corruption during product transfers from the PDR server.

The Aqua SST reprocessing will start in late March 2004 after new ESDTs are received and installed at the GES DAAC for Collection 4 SST products.

2.5 Ocean

McClain said he discussed with Paula Bontempi the need to (at some point) decide how to organize scientists' field Cal/Val activities. Many people are doing work in this area, but there is a need to orchestrate all these efforts cohesively.

Masuoka asked if McClain has been involved in the SST issues, and McClain said that he will talk to Peter Minnett and Bob Evans to start that dialogue. Salomonson said some of the ongoing validation efforts may now be thin on funds. McClain said that we spent 10 years of effort on SeaWiFS, MODIS, and SIMBIOS, so now we need to ensure that we preserve the core key components of those efforts.

McClain suggested including additional folks at next MODIS Science Team Meeting, like the MERIS team, to facilitate greater cross comparison and collaborations.

2.6 Atmosphere

King noted that there is a new paper submitted for publication that contains very careful measurements of ocean bidirectional reflectance for all view zenith and azimuth angles for a wide variety of ocean conditions (sun angles, wind speed, etc.) This paper, based on Cloud Absorption Radiometer data acquired during the CLAMS experiment of 2001, has been submitted for publication to the Journal of the Atmospheric Sciences (CLAMS special issue). It compares these atmospherically corrected measurements with 3 versions of the Cox and Munk ocean reflectance model, and should be of wide interest to the ocean biology members of the MODIS science team. The paper, by Gatebe et al., can be found on the MODIS-atmosphere web site (in PDF) at http://modis-atmos.gsfc.nasa.gov/reference.html. King and Platnick have also co-authored a paper published on land surface reflectance BRDF based on data acquired in Africa during the SAFARI 2000 field campaign (Gatebe et al. 2003; also available on the MODIS-atmosphere web site). A lot of work is happening between the Atmosphere and Land teams, with the recent ocean BRDF observations of interest to the MODIS Oceans team, indicating a high level of collaboration between the various discipline groups of MODIS.

2.7 Cryosphere

Hall suggested creating an ice surface temperature lithograph. She also wondered if there is a need to do more of these lithographs.

3.0 Action Items

3.1 New Action Items

None.

3.2 Old Action Items

3.2.1 Tech Team to further discuss TRW using MODIS data for validation of the NPP/NPOESS production process.
Status: Open.

3.2.2 PIP to develop list of items to go into work plan for the new contract (EMD).
Status: Closed, Shaida sent a list to ESDIS Project several months ago.

3.2.3 Kempler to bring back some proposals for how the disciplines can deal with the DAAC distribution problem.
Status: Open.

3.2.4 Masuoka to pursue MODAPS sending L1A Ocean subsets to University of Miami.
Status: Closed, Per Gene Feldman the University of Miami folks will pull L1A subset from the SeaWiFS ftp site.